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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,689	11/08/2001	Ivo Wilhelmus Johannes Marie Rutten	US 018180	9571

7590

08/29/2003

Corporate Patent Counsel  
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EXAMINER

NGUYEN, TRUNG Q

ART UNIT

PAPER NUMBER

2829

DATE MAILED: 08/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/005,689	RUTTEN, IVO WILHELMUS JOHANNES MARIE	
	Examiner	Art Unit	
	Trung Q. Nguyen	2829	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 November 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldridge et al. (6,597,187) in view of Pylkki et al. (U.S. 5,441,343).

As to claims 1, 12 and 16-17 and 11, Eldridge et al. disclose in Figure 23 a test probe comprising: a plurality of bond pads 2116 on an integrated circuit substrate 2111, one or more contact devices 2118 that are designed to provide a contact point for establishing an electrical contact (see Fig. 23) between each contact device of the one or more contact devices and a device-under-test 2110.

Eldridge et al. fails to disclose bonding wire that is bonded to a first point and a second point on the test probe. However, Pylkki et al. disclose in Figures 1, 3 and 6 a bonding wire 50 that is bonded to a first point via ending of 54 of Figure 3 and a second point via ending of 52 of Figure 3 on the test probe, and the contact point of each contact device is located on the bonding wire that forms the contact device via contact point 58 of Figure 3, between the first point and the second point (see Fig. 3), Pulkki et al. also disclose the bonding wire 50 of Figure 6 includes a resilient material (column 7, lines 30-35)

Therefore, at the time of the subject invention, it would have been obvious for a person of ordinary skill in the art to modify the device of Eldridge et al. by replacing the contact devices 2118 by a V shape contact device 50 of Figures 1 and 3 as taught by Pylkki et al. because the V-shape contact device provide for a minimum pitch between contact, also conventional boding machines are routinely tested at this minimum spacing, and thereby statistics can be readily obtained to assess the variances of this process for a given boding machine, or for different bonding wire materials.

As to claims 2, 14 and 19, Pylkki et al. disclose in Figures 1 and 3 the first point and the second point on the test probe of each contact device are substantially adjacent.

As to claims 3, 7, 13 and 18, Eldridge et al. disclose in Figure 23 the test probe includes one or more bond pads 2116. It is obvious that first and second point of the contact device V-shape as taught by Pylkki et al. can be located on a common bond pads 2116 of Eldridge as to the above rejection and motivation of claim 1.

As to claims 4, 8, 15 and 20, Eldridge et al. disclose in Figure 23 the test probe includes an integrated circuit substrate 2111 and one or more contact devices 2118 and 2116 are located on the IC substrate 2111, the bonding wire 50 of Pulkki et al. produce a vertex via vertical contacting point that is

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substantially above an upper-layer plane (see Fig. 23) of the integrated circuit substrate 2110.

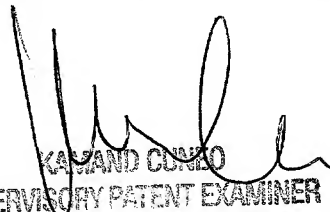
As to claims 5-6, 8-10, Eldridge et al. disclose in Figure 23 a test probe includes one or more test circuits 2120 that are operable coupled to the one or more contact devices 2118, and at least one or more test circuits 2120 is located on the integrated circuit substrate 2110.

### **Conclusion**

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trung Nguyen whose telephone number is 703-305-4925. The examiner can normally be reached on Monday through Friday, 8:30AM – 5:00PM. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-5841. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cuneo Kammie can be reached at (703) 308-1233.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0956.

*Trung Nguyen*  
Patent Examiner  
Group Art Unit 2829  
August 20, 2003

  
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